



The Longleaf Pine Ecosystem

A Wildlife Bonanza!

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A WELL-MANAGED stand of longleaf pine is like a piece of natural history that should be passed to future generations.

Longleaf pine, properly managed with prescribed fire and thinning, can be the best habitat available to many wildlife species. It is not just another pine tree, it is a wildlife bonanza!

The acreage of longleaf has been on the decline for over 100 years. In fact, it is estimated that only five percent of the original longleaf forest acreage remains. Several organizations such as the Longleaf Alliance, which is a partnership of universities, private interests, and government agencies, have been established with the commitment to restore the longleaf ecosystem. This effort was boosted by the Secretary of Agriculture with the designation of parts of nine Southeastern states as a Longleaf Pine National Conservation Priority Area for the Conservation Reserve Program (CRP).

This designation provided private landowners with incentives to enroll eligible lands into CRP, which will be

established to longleaf and managed for associated wildlife. This has accomplished a significant turnaround in the decline over its historical range.

Approximately 32,000 acres of longleaf restoration were approved in the initial CRP sign-up period in Alabama.

Longleaf pine is a critical part of the ecosystem that can yield the wildlife benefits that nature intended. Planting rates of between 300 and 500 trees per acre will ensure that the canopy remains open to prevent early canopy closure.

The use of controlled fire is an essential tool to maintain natural plant and animal communities within the longleaf pine ecosystem.

Prescribed Fire

It has long been recognized that naturally occurring fires have been a factor in the forests of the South for thousands of years. The longleaf pine, and many of the species of wildlife that are commonly associated with it, not only survive in the presence of fire but actually thrive with it. Forest landowner Daniel Powell of

Washington County summed it up very well when he said, "If you do not burn a longleaf stand, you simply will not have longleaf."

From the grass stage throughout its life, the longleaf pine is adapted for fire. Although a wildfire in the right conditions can be devastating to a stand, a combination of the open growth habit of the longleaf pine, coupled with the frequent use of prescribed fire, can help develop excellent wildlife habitat.

The fire stimulates the production of many native grasses, legumes, vines, and shrubs, and releases important nutrients such as nitrogen into the soil. In some

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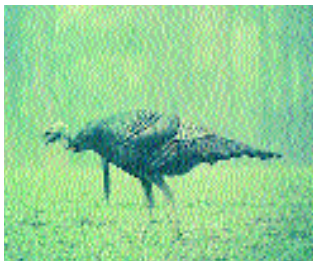
cases, using selective herbicides improves the variety of plant species available for wildlife.

Since the longleaf is tolerant of fire throughout the early stages of growth, the benefits of prescribed burning are immediately available. Loblolly pine is not as fire tolerant and stands are generally burned a little later in age than longleaf stands.

The use of prescribed fire is much like using electricity. It is welcomed when properly used, or it can be dangerous when proper controls are not in place. Anyone who uses prescribed fire should be trained and experienced. Programs are available to teach the basics of prescribed burning. Trained and experienced consultants are also available to conduct prescribed burns. A burning permit from the Alabama Forestry Commission is required.

Eastern Wild Turkey

The eastern wild turkey rapidly declined with the clearing of forestland. Today, populations of wild turkey can be found using habitats in most areas of the state. Turkey prefer an open forest habitat, intermixed with grassy openings. The use of prescribed fire is recommended as soon as tree height in young stands allows for safe burning. These areas provide food sources such as seeds and insects, tall grasses and forbs for nesting, and openings for brood habitat. For good wild turkey management, prescribe burn at least one-third of the stand annually and provide openings on 10 to 50 percent of the area being managed. Openings of 5 to 20 acres are preferred.



White-tailed Deer

Although there is no shortage of deer habitat, it is an established fact that deer prefer the browse in areas that have been burned.



Fire increases the yield and quality of forbs, legumes, and other browse species. For proper habitat enhancement, prescribe burn at least 20 percent of the stand annually, in conjunction with planting well-distributed annual food plots of at least 1 to 5 acres.

Red-cockaded Woodpecker

The red-cockaded woodpecker was

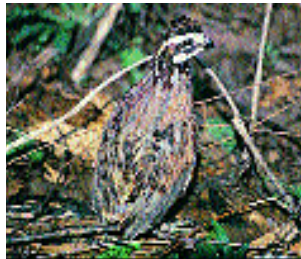


Red-cockaded woodpeckers nest in cavities of pines that are at least 60 years old.

once common throughout the South. These birds make nesting cavities in pines that are typically 60 years or more in age. While it is quite a stretch of the imagination to consider a newly planted longleaf pine seedling as habitat for this bird, the longleaf is capable of living and growing long enough to qualify. Red-cockaded woodpeckers prefer habitats where hardwoods are controlled with labeled herbicides and prescribed fire and stocking of stands is maintained at 50 to 80 square feet of basal area. A 100-year rotation is the minimum recommended for the red-cockaded woodpecker.

Bobwhite Quail

The longleaf pine provides excellent habitat for bobwhite quail. The



use of planting rates of 300 to 500 per acre increases the time for canopy closure. Allowing light to reach the floor increases the development of understory plants that are beneficial to bobwhite quail. This new growth attracts insects on which the chicks are dependent. Annual use of prescribed fire on 33 to 50 percent of a tract is recommended.

Additional management practices are light winter disking and planting small food plots. Retain areas with blackberry thickets, wild plum, and similar cover.

Gopher Tortoise

The gopher tortoise lives in the deep sandy soils of the southeast including south Alabama. Most burrow locations are in longleaf



pine associated habitats and newly planted pine stands that are sufficiently open for the establishment of low growing herbaceous vegetation. They feed on legumes, fruits, and forbs found in open canopy areas. These plants are stimulated by prescribed fire. Areas of closed canopy do not provide this type of habitat. 🐢